

Reading Assignment for Section 2.6

MATH 130: Calculus I, Sections 2 and 3
Fall Semester 2013

Follow the general guidelines for the Reading Assignment (the salmon colored handout). Be sure to include and label all four standard parts a,b,c,d of the Reading Assignment in what you hand in. Be sure to **staple** together each assignment, and include your **name** and which **section** of calculus you are in at the top. Neatness is appreciated!!!

Due: at the beginning of class on Wednesday, September 25th

Read:

Section 2.6, pages 94-102

Remember that your answers should include complete sentences for every question.

Reading Questions for part (a):

1. What does it mean for a function $f(x)$ to be continuous at a point a ?
2. (a) What are the three items on the continuity checklist? (b) Assuming the order of the checklist in the book, draw a diagram of a function that fails the first item on the checklist for some value a , but NOT the second at a . Explain. (c) Assuming the order of the checklist in the book, draw a diagram of a function that fails the second item on the checklist at a , but NOT the first at a . Explain. (d) Assuming the order of the checklist in the book, draw a diagram of a function that fails the third item on the checklist at a , but NOT the first or second (that is, both the first and second do hold at $x = a$). Explain.
3. Many different kinds of functions are discussed throughout the section. On what intervals are these functions continuous? I encourage you to briefly describe some specific kinds of functions and also to attempt a general statement about groups of functions.

Remember parts b-d on the salmon handout!